

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/CH 03/00751

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H05K7/20

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H05K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 856 909 A (KAMO HIROAKI ET AL) 5 January 1999 (1999-01-05) the whole document	1,2,8-11
A	EP 0 900 621 A (LORCH SCHWEISSTECHNIK GMBH) 10 March 1999 (1999-03-10) the whole document	3
A	US 2002/026996 A1 (FUNG HUI S ET AL) 7 March 2002 (2002-03-07) the whole document	1
A	EP 0 914 030 A (LUCENT TECHNOLOGIES INC) 6 May 1999 (1999-05-06) the whole document	1
A	US 4 699 208 A (BLOESL KARL ET AL) 13 October 1987 (1987-10-13) the whole document	1

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

### ° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

30 July 2004

Date of mailing of the international search report

06/08/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel: (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Toussaint, F

## INTERNATIONAL SEARCH REPORT

I	ational Application No PCT/CH 03/00751
---	-------------------------------------------

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 5856909	A	05-01-1999	JP JP CA DE GB	3147222 B2 9289719 A 2202447 A1 19716401 A1 2312271 A ,B		19-03-2001 04-11-1997 19-10-1997 20-11-1997 22-10-1997
EP 0900621	A	10-03-1999	DE EP	19739309 A1 0900621 A2		18-03-1999 10-03-1999
US 2002026996	A1	07-03-2002		NONE		
EP 0914030	A	06-05-1999	EP AU BR CA CN ID JP	0914030 A1 708175 B1 9804045 A 2248518 A1 1220574 A ,B 21139 A 11195888 A		06-05-1999 29-07-1999 21-12-1999 28-04-1999 23-06-1999 29-04-1999 21-07-1999
US 4699208	A	13-10-1987	DE CH IT JP	3517149 A1 668881 A5 1188424 B 62011255 A		13-11-1986 31-01-1989 14-01-1988 20-01-1987